

Application Number 10/731,868
Amendment dated May 24, 2006
Responsive to Office Action mailed February 24, 2006

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claim 1 (Currently Amended): A method comprising:

making an incision in ~~the~~ a scalp of a head of a patient to create a scalp flap ~~flap~~;

separating the scalp flap from a skull of the patient, wherein the scalp flap is attached to the remainder of the scalp by a fold;

after separating the scalp flap from the skull, separating a portion of the remainder of the scalp adjacent to the fold from the skull to ~~creating~~ create a pocket adjacent to the fold and between the scalp and a ~~the~~ skull; and

placing at least a portion of a low-profile implantable medical device in the pocket adjacent to the fold and underneath the scalp.

Claim 2 (Original): The method of claim 1, wherein the low-profile implantable medical device comprises:

a first module that includes control electronics within a first housing;

a second module that includes a second housing; and

a flexible overmold that at least partially covers the first and second housings.

Claim 3 (Original): The method of claim 1, wherein the low-profile implantable medical device has a maximum thickness of between approximately 4 millimeters and approximately 8 millimeters.

Claim 4 (Original): The method of claim 1, wherein the low-profile implantable medical device has a maximum thickness of approximately 6 millimeters.

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Claim 5 (Original): The method of claim 1, wherein the low-profile implantable medical device has a periphery and wherein the angle between the periphery and the skull is greater than ninety degrees.

Claim 6 (Original): The method of claim 5, wherein the angle is approximately 135 degrees.

Claim 7 (Original): The method of claim 1, further comprising connecting a lead to the low-profile implantable medical device.

Claim 8 (Original): The method of claim 6, further comprising:
drilling a burr hole through the skull; and
inserting a portion of the lead through the burr hole.

Claim 9 (Original): The method of claim 1, further comprising anchoring the low-profile implantable medical device to the skull.

Claim 10 (Original): The method of claim 9, wherein anchoring the low-profile implantable medical device to the skull comprises anchoring the low-profile implantable medical device to the skull with a bone screw.

Claim 11 (Original): The method of claim 1, further comprising:
covering at least a portion of the low-profile implantable medical device with the scalp flap; and
suturing the scalp flap to close the incision.

Claim 12 (Original): The method of claim 1, further comprising creating a recess in the skull.

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Claim 13 (Withdrawn): The method of claim 1, further comprising:
creating a second pocket between the scalp and the skull; and
placing at least a portion of a low-profile implantable medical device in the second pocket.

Claim 14 (Withdrawn): The method of claim 13, wherein the low-profile implantable medical device comprises:
a first module within a first housing;
a flexible overmold that at least partially covers the first housings;
a second module that includes a second housing; and
a flexible tether member that couples the second module to the first module,
wherein placing at least a portion of a low-profile implantable medical device in the second pocket comprises placing at least a portion of the second module in the second pocket.

Claim 15 (Original): The method of claim 1, wherein the low-profile implantable medical device is contoured in three dimensions to substantially conform to the shape of a skull.

Claim 16 (Original): The method of claim 1, further comprising adjusting the low-profile implantable medical device to cause a contour of the low-profile implantable medical device to more closely match a contour of the skull.

Claim 17 (Original): The method of claim 1, further comprising administering a local anesthetic to the patient prior to making the incision.

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Claim 18 (Withdrawn): A method comprising:
in a first surgical procedure,
making an incision in the scalp of a head of a patient to create a scalp flap;
exposing a skull beneath the scalp flap;
creating a pocket between the scalp and the skull; and
placing at least a portion of a dummy low-profile implantable medical device in
the pocket;
covering at least a portion of the dummy low-profile implantable medical device
with the scalp flap;
suturing the scalp flap to close the incision; and
in a second surgical procedure, removing the dummy low-profile implantable medical
device and implanting a working low-profile implantable medical device in place of the dummy
low-profile implantable medical device.

Claim 19 (Withdrawn): The method of claim 18, further comprising adjusting a contour of
the working low-profile implantable medical device as a function of the shape of the dummy
low-profile implantable medical device.

Claim 20 (Withdrawn): The method of claim 18, wherein the dummy low-profile
implantable medical device has a first volume prior to suturing, the method further comprising
expanding the dummy low-profile implantable medical device to a second volume following
suturing.

Claim 21 (Withdrawn): The method of claim 20, wherein expanding the dummy low-
profile implantable medical device to a second volume comprises injecting fluid into the dummy
low-profile implantable medical device.

Claim 22 (New): The method of claim 1, wherein placing at least a portion of a low-profile
implantable medical device in the pocket comprises placing at least half of the low-profile
implantable medical device in the pocket adjacent to the fold.

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Claim 23 (New): The method of claim 1, wherein placing at least a portion of a low-profile implantable medical device in the pocket comprises placing substantially all of the implantable medical device in the pocket adjacent to the fold.